Product data sheet
Characteristics

XX930S1A1HM12
Ultrasonic sensors XX, ultrasonic sensor cylindrical M30, Sn=1 m, analog 0 10 V sync, M12

Main

Range of product	Telemecanique Ultrasonic sensors XX
Sensor type	Ultrasonic sensor
Series name	General purpose
Sensor name	XX9
Sensor design	Cylindrical M30
Detection system	Diffuse
[Sn] nominal sensing distance	1 m adjustable with teach push-button
Material	Metal
Type of output signal	Analogue
Wiring technique	5-wire
Analogue output function	0...10 V
[Us] rated supply voltage	15...24 V DC with reverse polarity protection
Electrical connection	Male connector M12 5 pins
[Sd] sensing range	0.051…0.991 m
Beam angle	10 °
IP degree of protection	IP65 conforming to IEC 60529

Complementary

Enclosure material	Stainless steel 303
Front material	Silicone
Thread type	M30 x 1.5
Supply voltage limits	14…28 V DC
Function available	With synchronisation mode
[Sa] assured operating distance	0.051…0.991 m (teach mode)
Blind zone	0…51 mm
Transmission frequency	200 kHz
Repeat accuracy	0.9 %
Deviation angle from 90° of object to be detected	-8…8 °
Minimum size of detected object	Cylinder diameter 1.6 mm at 0.635 m
Status LED	Setting-up assistance: 1 LED (dual colour) Supply on: 1 LED (green) Output state: 1 LED (yellow)
Current consumption	60 mA
Maximum switching capacity	>= 1 kOhm overload and short-circuit protection
Setting-up	Slope selection using teach button
Maximum delay first up	720 ms
Maximum delay response	25 ms
Maximum delay recovery	25 ms
Marking	CE
Threaded length	45 mm
Height	35 mm
Width	35 mm
Depth	85 mm
Net weight	0.095 kg

Environment

Standards	IEC 60947-5-2
Product certifications	UL[RETURN]cCSAus
Ambient air temperature for operation	0…50 °C
Ambient air temperature for storage	-40…80 °C
Vibration resistance	+/-1 mm conforming to IEC 60068-2-6 (f = 10…55 Hz)
Shock resistance	30 gn in all 3 axes for 11 ms conforming to IEC 60068-2-27
Resistance to electrostatic discharge	8 kV level 4 conforming to IEC 61000-4-2
Resistance to electromagnetic fields	10 V/m level 3 conforming to IEC 61000-4-3
Resistance to fast transients	1 kV level 3 conforming to IEC 61000-4-4

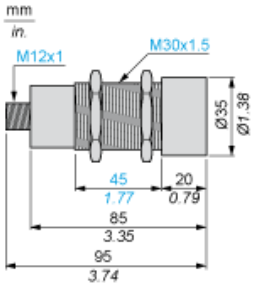
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.2 cm
Package 1 Width	13 cm
Package 1 Length	9.5 cm
Package 1 Weight	126 g

Offer Sustainability

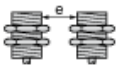
California proposition 65	WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
For all Reach Rohs enquiries contact us at	sustainability@tesensors.com

Dimensions



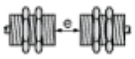
Minimum Mounting Distances

Side by side



e : respect the distances indicated on the detection curves

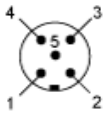
Face to face



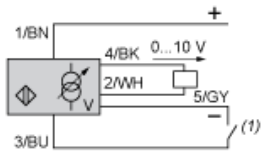
e > 4 x Sn

Wiring Diagram

5-Wire Type

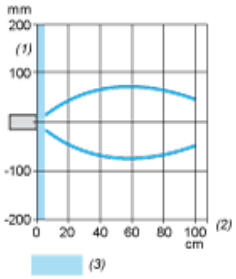


(1) (+)
(2) Return signal or teach
(3) (-)
(4) Output signal
(5) Synchronisation (Grey)



BN Brown
WH White
BU Blue
BK Black
GY Grey
(1) Open = burst
Close = no burst

Curves



(1) Parallel movement
(2) Distance
(3) Blind zone for diffuse sensors.